General Information

Geology- See file information

FEMA Map Flood Plain-



Census Information- see file information

Water Supply- The water supply to this area is primarily served by surface water intakes on Lake Michigan.

- 1) Gary Hobart Water Corporation- 2 intakes
 - 1. Borman Park
 - 2. Ogden Dunes

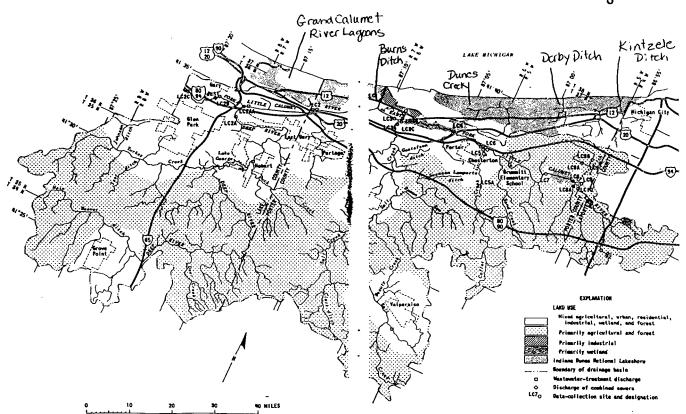
(see attached phone log for details) 3

- 2) City of Hammond has an intake in Lake Michigan and serves all customers in city limits. Hammond sells water to Munster, Highland and Lansing Village Serves 105,900 people1
- 3) East Chicago- no wells used for drinking purposes. All served off of surface water intake.5
- 4) Whiting-does not have any municipal or private wells.5

Groundwater- Some residences and industries in area use groundwater See attached report for locations of GW users.1

Points of Entry- Drainage Ditch see below. 2

Points of Entry.



Grand Calumet River discharges into Lake Michigan by way of Indiana Harbor Canal.

The East arm of the Little Calumet River. Deep River. and all of the West arm of the Little Calumet River east of Griffith. discharge into Lake Michigan through the Burns Waterway. Burns Ditch is the Western Arm of the Little Calumet River.

Primary Sensitive Environments see below2

Table 1 .-- Land use within drainage basins at the Indiana Dunes National Lakeshore Land use (percentage of total area) Agricul-Public Wet- ture an parks land forest Drainage Resi-Area ture and Indus trial³ (mi²) basin Urban² dencial Grand Calumet River lagoons 1.35 9 1 45 9 29 7 Little Calumet 331 2 1 75 8 11 River Kintzele ditch 4 12.7 12 54 8 19 3 Derby ditch 4.64 50 7 33 2 2 Dunes Creek 7.37 56 10 19 8 3

Primary Sensitive Environments cont.

Wetlands surround Cedar Lake, Lake George near Whiting, Lake George near Hobart, and Wolf Lake, 1

55% of Dunes Creek and Derby Ditch are used for park and wetlands.2

Precipitation

Mean annual precipitation across Lakeshore ranges from 36 inches in the West to greater than 40 inches in the east. Maximum and minimum monthly precipitations are generally in April and February, respectively.

Endangered Species

Pitchers Thistly-located in Lakeshore Dunes and Blowout areas. Lake and Porter counties.4

Fishing

The West Arms of the Little Calumet and Grand Calumet Rivers offer book aquatic habitat due to heavy input from industrial and domestic pollution sources. Tomiv right from pollution sources.

Although the main use of the Grand Calumet Fiver is industrial people have been seen fishing along the river banks, (see attached phone log.)

 $^{^{1}}$ Public parks generally include wetlands and forest. 2 Urban land use includes cities, towns, streets, and

rail right of ways. Industrial land use includes landfills.

Indiana Dunes State Park and National lakeshore have tishing on the beach and pier. Also have boat fishing along Lake Michigan.

Lake Michigan-Commercial Fisheries as well as recreational fishing -coho and chinook salmon

- -steelhead
- -brown trout
- -yellow perchl

Recreation

Boating occurs on Little Calumet River. 1

Swimming occurs at all Lake Michigan municipal beaches, including Indiana Dunes State Park.1

Closing of Recreation Areas-

Dunes State Park has not shut down in the last two years due to chemical contamination. A portion (100-200ft, section), of the beach 12 miles east of Gary did close due to a high fecal count from Dune Creek emptying into Lake Michigan. This portion of the beach has shut down several times in the last two years. (see attached phone log for reference.)

References

Clark, Douglas, and D. Larrison, editors. Governor's Water Resource Study Commission, State of Indiana, The Indiana Water Resource, Availability, Uses, and Needs, 1980.

Hardy, Mark A., 1984. Chemical and Biological Quality of Streams at the Indiana Dunes National Lakeshore. Indiana. 1978-1980. Water-Resources Investigations 83-4208. U.S. Geological Survey. Indianapolis. Indiana.

Buczek. Ken. May 13. 1991, Vice President of Production and Engineering. Gary Hobart Water Corporation, telephone Conversation, contacted by Jennelle Marcereau of E & E.

U.S. Department of the Interior, November 6, 1987. Fish and Wildlife Service. Endangered Species List for Region V. Twin Cities. Minnesota.

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